intervention for rupture (n = 2), symptoms (n = 13) or size. Mean size at intervention was 2.2 cm (range, 0.8-3.7). Fifteen patients underwent open repair while 28 (including all ruptures) underwent EV embolization (n = 26) or covered stent exclusion (n = 2). In the open surgical cohort seven patients underwent aneurysmectomy, while eight underwent aneurysmectomy with splenectomy. In the elective EV cohort technical success was noted in all patients; both patients managed for rupture required either intra-operative or delayed conversion to splenectomy for hemodynamic instability and splenic infarction respectively. No major operative morbidity or mortality was identified following elective open or EV repair. No recurrence, aneurysm-related mortality or major morbidity was identified during a mean follow-up of 42 months (range, 0-89).

Conclusions: This contemporary experience is comparable to our historical experience in female predominance, aneurysm size at intervention, and postoperative morbidity and mortality justifying the current EV approach. There has been a reduction in grand multiparity by half (25% to 13%). Rupture remains a recognized risk which carries notable morbidity and mortality.

Author Disclosures: S. Arya: Nothing to disclose; **H. Chen**: Nothing to disclose; **D. M. Coleman**: Nothing to disclose; **E. Criado**: Nothing to disclose; **J. L. Eliason**: Nothing to disclose; **A. Eliassen**: Nothing to disclose; **J. Rectenwald**: Nothing to disclose; **J. C. Stanley**: Nothing to disclose.

RR14.

Covered Stents Convey Improved Performance Over Bare-Metal Stents for Atherosclerotic Renal Artery Stenosis

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Objectives: The endovascular management of atherosclerotic renal artery stenosis (RAS) has evolved over several decades. Endovascular therapy with stents (PTAS) often utilizes balloon-expandable bare-metal stents due to their radial force. However, restenosis frequently occurs. No studies have investigated the patency of covered stents in comparison to bare-metal stents in the treatment of RAS.

Methods: We performed a retrospective chart review of 197 patients at our institution who underwent renal artery stenting for atherosclerotic RAS from 2005-2011. 179 patients were included with a total of 206 stented renal arteries and 226 PTAS interventions. Index cases as well as first and second reinterventions were examined.

Results: 179 patients were included in the study with a total of 226 interventions performed with PTAS. Of these interventions, 195 were index (first) procedures. 20 PTAS were in vessels which had required one previous intervention and 11 PTAS were in vessels that required two previous interventions. The average follow-up was 30 months. 48 vessels were treated with angioplasty and covered stents and 178 vessels were treated with angioplasty and bare-metal stents. 4 of 48 (8.3%) in the covered stent group and 41 vessels of 178 (23%) in the bare-metal stent group developed restenosis requiring intervention. Primary patency for covered stents was 100% at 12 months and 93% at 24 months; bare metal stent patency was 83% at 12 months and 74% at 24 months. There was a statistical significance in patency in comparing covered stents to bare-metal stents with $P < .045$ in the overall study.

Conclusions: While initial success was seen in treating RAS with bare-metal stents, covered stents confer increased primary patency and decreased need for repeat secondary interventions. Covered stents should be considered in renal artery stenting for both primary index procedures and secondary interventions due to their improved performance over bare-metal stenting for ostial RAS.

Author Disclosures: D. Fisher: Atrium, Medtronic, Boston Scientific, Research Grants; **M. Fugate**: Atrium, Medtronic, Boston Scientific, Research GrantsBoston Scientific, Cordis, Consulting fees or other remuneration (payment); **M. Greer**: Atrium, Medtronic, Boston Scientific, Research Grants; **W. B. Harris**: Nothing to disclose; **J. Horn**: Atrium, Medtronic, Boston Scientific, Research Grants; **C. Joels**: Atrium, Medtronic, Boston Scientific, Research Grants; **C. Lesar**: Atrium, Medtronic, Boston Scientific, Research GrantsCordis, Boston Scientific, CSI, Consulting fees or other remuneration (payment); **S. Phade**: Atrium, Medtronic, Boston Scientific, Research Grants; **L. R. Sprouse**: Atrium, Medtronic, Boston Scientific,Research GrantsCordis, Boston Scientific, Consulting fees or other remuneration (payment).

R2: Rapid Paced Paper Session II

RR15.

Genetic Correlates of Cognitive Change in Patients Undergoing Carotid Interventions

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Objectives: Carotid interventions have been shown to decrease stroke risk and improve cerebral perfusion. However, nearly 40% of patients who undergo carotid revascularization procedures experience cognitive deterioration. We have demonstrated that subclinical microembolization is associated with memory decline. The role of genetic factors in cognitive function is unclear. We herein seek to assess genetic determinants as potential risk factors for these procedures.

Methods: Over one year period, patients undergoing carotid interventions at a single academic institution were recruited to participate. Patients underwent neuropsychological testing two weeks prior to and at one month following their procedure and MRI prior to and within 48 hours following their procedure. Saliva samples were collected for genetic testing and demographics were recorded. Logistic regressions were used to search for associations.

Results: 34 patients were included (18 CAS, 16 CEA); all were male with a mean age of 68. The majority of patients exhibit hypertension (94%) and have a history